**Biopiracy**

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**What is Bio-piracy?**

* A situation where indigenous knowledge of nature, originating with indigenous people, is used by others for profit, without permission from and with little or no compensation or recognition to the indigenous people themselves.
* Developed countries are exploiting developing countries genetic resources and indigenous communities traditional knowledge in the name of patents on the inventions derived from those genetic resources;

This leads to bio piracy.

Biopiracy operates through unfair application of patents to genetic resources and traditional knowledge. Biopiracy is the theft or usurpation of genetic materials especially plants and other biological materials by the patent process.

**Example**: use of indigenous knowledge of medicinal plants for patenting by medical companies without recognizing the fact that the knowledge is not new, or invented by the patenter, And thereby the piracy deprives the indigenous community to the rights to commercial exploitation of the technology that they themselves had developed.

**Threats due to biopiracy:**

* that knowledge and /or genetic resources belonging to a region, community or country is stolen or claimed as one's own.
* that the use of this knowledge or genetic resource in the area of its origin or traditional usage may be hampered
* that the patent holder will unfairly profit from the patent
* that the patent claimed and awarded illegally and unethically is bound to disturb an established system somewhere in the world.

**Effects of Biopiracy**:

Causes depletion of Biodiversity Examples:

Asia: Use to have more than 100,000 varities of rice in 20th century

Now: less than a dozen are planted in 70% of land being cultivated for Rice

India: 30,000

 Now: 10 varieties.

**Recent cases of Bio-piracy :**

**Neem Patent**:

* US patent office granted patent on a fungicidal product derived from seeds of the Neem
* India opposed the patent by claiming that the fungicidal properties of the Neem tree had been public knowledge in India for many centuries
* The oil from neem has been used traditionally by farmers to prevent fungus. It was neither a novel idea nor was it Inventive. The Patent was finally revoked by the European Patent Office.

**Haldi patent**

* In December 1993, a patent was filed by the University Of Mississippi Medical Center, Mississippi
* Applicants received US patent 5,401,504 for the use of turmeric powder as a wound-healing agent
* Indian Government objected to the patent
* The turmeric patent failed to satisfy the criteria of novelty in view of the cited turmeric’s qualities documented in ancient medical textbooks.

**Basmati patent**

* Rice Tec (US Co.) obtained a patent (US 5663484 ) on a type of rice produced by crossing a strain of Indian basmati rice with an American variety;
* The patent claimed rights in respect of basmati-like rice grown anywhere in the Western Hemisphere. It also claimed future rights on any new varieties produced by crossing the new variety with existing Asian varieties
* The farmers argued that an American rice producer should not be allowed to use the name ‘basmati’. Basmati rice is a valuable export crop earning India approximately US$800 million a year.
* As a result of a worldwide citizen campaign against RiceTec Basmati patents, USPTO struck down large sections of the Basmati patent.

**Yoga Patent**

* A US-based NRI, Bikram Choudhary's applied to get copyright for his method of teaching yoga;  He applied for the patent of yoga also;
* Yoga enthusiasts and gurus ---move is unjustified as yoga belongs to the entire human race.
* USPTOUSPTO has reportedly issued 150 yoga-related copyrights, 134 trademarks on yoga accessories and 2,315 yoga trademarks.
* IndiaIndia has taken a strong view against the granting of copyrights and patents to Yoga postures by the USPTO and is preparing to oppose patents.

**Colgate case:**

 Colgate was accused of stealing 1,000-year-old Indian toothpaste recipe

 Colgate obtained a US patent for the tooth powder composition comprising rust-like red iron oxide, clove oil, camphor, black pepper and spearmint ;

 Indian activists are accusing Colgate of 'biopiracy' for allegedly stealing and patenting a 1,000-year-old folk recipe for toothpaste. 

 All the ingredients date back to antiquity. They have been used by the common Indian man for thousands of years.

 Efforts are going on from India for building 34 million webpages document for substantiating that the ingredients were known in the art.

**Bioprospecting**

  The search for biological resources & accompanying indigenous knowledge for the purpose of commercial exploitation;

 It is a A process of appropriation and commercialization of natural products ranging from plants and animals; Bioprospecting could be a useful tool in economic conservation;